

Access Control Security Systems



ASSA®

Access control - the ASSA solution

What can access control achieve for you? It can secure a reduction in crime and the protection of your premises and assets, through the monitoring and restriction of people's movements. It can make your life easier, and achieve significant cost savings in the long term. However, installing a major access control system is a serious business decision, and needs a significant commitment of time and resources to ensure it goes smoothly. Mistakes can be costly. That is why you need to have complete confidence in the system and supplier you have chosen.













ASSA has been supplying electronic security systems, both large and small, for many years. Our products have a solid reputation for reliability, flexibility and innovation. As part of the ASSA ABLOY Group, we enjoy the support and backing of the world's leading manufacturer of security door hardware. The resources that this enables us to put into research and development ensure that we remain at the forefront of technology. All elements of our systems are developed and manufactured in-house. This means that they have been designed from the start to work together smoothly, and any support you may need – for any part of the system – is available from a single source.



Selected products from the ASSA range have been independently recognised and approved by SAFE/SSG



- Adaptability** – Programmable control of the system: your changing security needs can be met at the touch of a button.
- Accountability** – Full audit trails; all activity is logged, and alarms can be sounded if a problem arises.
- Control** – Access can be denied to a particular card or person instantly if security is compromised.
- Scheduling** – Vary your security level according to the time and the date.
- Versatility** – Link a wide variety of functions into your security system, from alarms to building heating and lighting.
- Intelligence** – The system can monitor its own operations and knows when to call for human intervention.

	 <p>SOLICARD 4000</p>	 <p>SOLICARD 6000</p>	
	16-door	Standard	Networked
System Size	 <p>Small - Medium Sites (up to 16 doors)</p>	 <p>Medium - Large Sites ('00s of doors)</p>	 <p>Building Complexes ('000s of doors)</p>
Token Technology	 <p>Choice of card and token technologies</p>	 <p>Mix-and-match multiple card and token technologies on the same system</p>	
Security Levels	 <p>High security distributed intelligence system. Choice of five security levels (open, common code, card, card plus PIN, blocked) at each door</p>		
System Control	 <p>Central control from a single PC</p>	 <p>Distributed control by multiple workstations</p>	
Building Management	 <p>Integration with alarm system</p>	 <p>Full integration with all elements of building systems including alarms, CCTV, lift control, vending and debit systems, etc.</p>	

Selecting a system

SOLICARD 4000

SOLICARD 4000 is an access control system utilising the latest technology, suitable for small to medium sized installations. Drawing on our extensive experience in developing and manufacturing security systems, ASSA designed the SOLICARD 4000 around the needs of the user. Despite its sophisticated abilities, the ease of use of the system makes it ideal for the non-specialist operator.

The physical design of the system has been carefully thought through to minimise installation costs. As for the ongoing running of the system, that is made simple by the user-friendly software – which nevertheless is capable of extensive customisation to meet your exact requirements.



Details at a glance

- 16 door system with up to 7,000 user cards.
- Programmed and administered through a PC.
- Modular design structure facilitates cost-effective expansion.
- Usable with most standard reader technologies.
- Use of DACs simplifies installation and maintenance.

Upgrade Capability

- Standard control unit has 4 door capacity.
- May be expanded to 16 doors by adding up to three 4-Door Cards to the control unit.
- SOLICARD 4000 uses the same accessories, cabling and system architecture as SOLICARD 6000. It is therefore possible to move up to the more advanced system by upgrading just the control unit and software. User cards would not need to be reissued or reprogrammed.



Distributed Security

The intelligence of SOLICARD 4000 is housed in a separate control unit, installed in a secure area away from the door – preventing attackers from compromising your security. When a card is presented, the control unit confirms its authorisation and signals the lock to open. On-line monitoring of the system through a PC is possible, although the system will still preserve its security if communications to the computer are lost. An audit trail of the last 2,000 events is recorded.



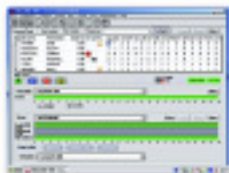
Security Levels

SOLICARD 4000 can provide five different levels of security at each access point: door open, common code, token, token plus PIN, and door blocked. Depending on your security requirements, the system can be set up to use any standard reader technology, from standard magstripe to very high security smartcard readers and biometric systems.



User Capacity

Up to 7,000 individual cards are recorded in the control unit. These users may be organised into groups to manage their access levels, and there is a facility to issue temporary and visitor cards. Full accountability is ensured through the provision of reports detailing people's movements through individual doors at any time.



Scheduling

Each group of users may be allocated different levels of access, from free passage to no entry at all, during different time periods. SOLICARD 4000 allows each schedule to contain 8 separate day types with 2 time intervals per day, allowing for full customisation for weekend and holiday opening and additional after-hours security measures.

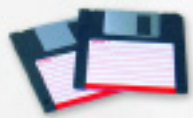


System Integration

SOLICARD 4000 uses intelligent Door Access Controllers (DACs) at each door, which simplifies installation and allows for a wide range of equipment to be connected. The system may also be integrated with the building alarm system, with provision for temporary or permanent alarm bypass, and high security control of alarm activation and deactivation through specially authorised cards and readers.

Entry-Level System

SOLICARD 4000



SOLICARD 4000 software



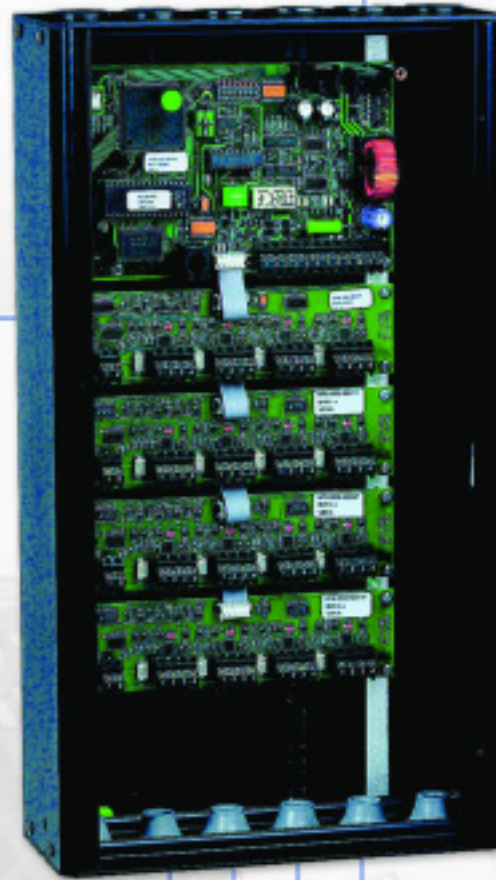
Computer

CL-20 Signal Transducer

CL-20 to control unit: max 1,000m



Printer



4000 Control Unit

Control unit to DAC: max 1,000m



Door 1



Door 2

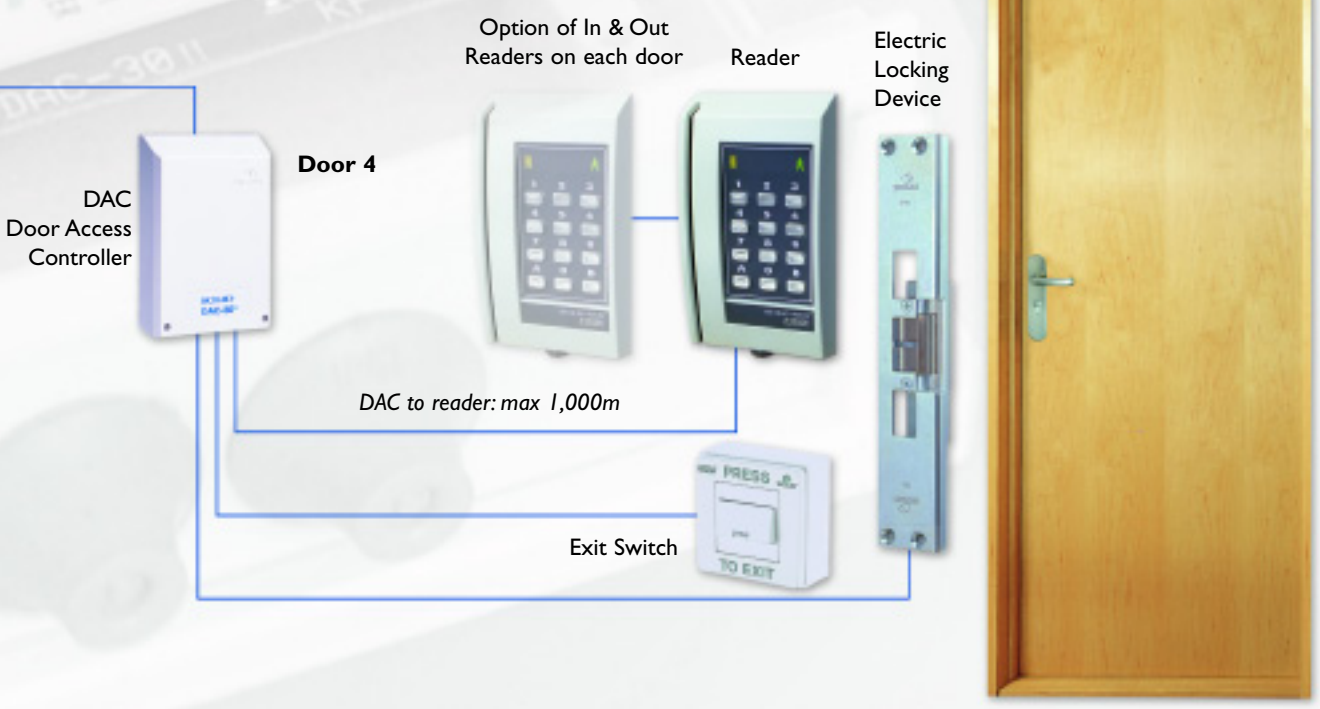
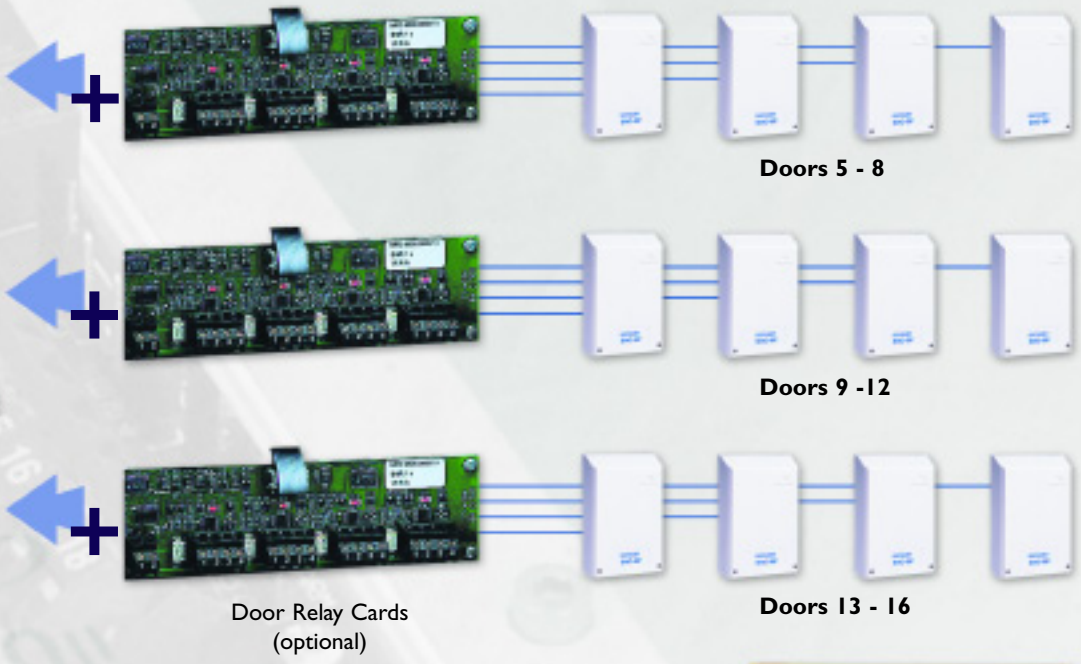


Door 3





Building Systems Integration (optional)



System Schematic

SOLICARD 6000

SOLICARD 6000 is a powerful and sophisticated access control system utilising the latest technology. It is suitable for any application, including networked installations and remote sites. However, the modular nature of the system allows you to tailor it to meet your own individual requirements, while still providing the flexibility to expand its functions if your needs develop.

When developing SOLICARD 6000, we drew on our extensive design and engineering expertise to ensure that the system is not only powerful, but also robust and easy to maintain and use. As with the SOLICARD 4000, the physical design of the system has been carefully thought through to minimise installation costs while the ongoing running of the system is made simple by the user-friendly software.



Details at a glance

- 3 software options – 16-door, standard or networked.
- Each control unit operates 1-16 doors depending on type.
- Full functionality software with many add-on modules available.
- Usable with most standard reader technologies, which may all be combined in the same system.
- Use of DACs simplifies installation and maintenance.

Upgrade Capability

- 6301 and 6304 Control Units may be used with 1 and 4 doors respectively.
- 6416 Control Unit has 4 door capacity. It may be expanded to 16 door capacity by adding up to three 4-Door Cards to the control unit.
- The Standard software allows many control units to be linked together in the same system (up to 99 per loop/COM port, although this may vary depending on the options installed).
- The Networked software allows the system to be set up with several integrated workstations, each of which manages its own loop of control units.



Distributed Security

The intelligence of SOLICARD 6000 is housed in separate control units, installed in secure areas away from the doors – preventing attackers from compromising your security. When a card is presented, the control unit confirms its authorisation and signals the lock to open. On-line monitoring of the system through a PC or network is possible, although the system will still preserve its security if communications to the computers are lost. An audit trail of all events is recorded in each control unit.



Security Levels

SOLICARD 6000 can provide five different levels of security at each access point: door open, common code, token, token plus PIN, and door blocked. Depending on your security requirements, the system can be set up to use any standard reader technology, from standard magstripe to very high security smartcard readers and biometric systems; and the SOLICARD 6000 software allows for different reader types to be integrated into the same system if required.



User Capacity

From 16,000 to 65,000 individual cards are recorded in the control units (depending on type), and this capacity is expanded to 1,000,000 when the system is used on-line. These users may be organised into an unlimited number of groups to manage their access levels, and there is a facility to issue temporary and visitor cards. Full accountability is ensured through the provision of reports detailing people's movements through individual doors at any time.



Scheduling

Each group of users may be allocated different levels of access, from free passage to no entry at all, during different time periods. SOLICARD 6000 allows each schedule to contain 8 separate day types with 5 time intervals per day, allowing for full customisation for shift-work, weekend and holiday opening, and additional after-hours security measures.



System Integration

SOLICARD 6000 may be integrated with a wide variety of other building systems, from fire and intruder alarms to heating and lighting. All of these may be controlled through the access control system by authorised users. The 6416 control unit uses intelligent Door Access Controllers (DACs) at each door, which simplifies installation and allows for a wide range of equipment to be connected.

Advanced System

SOLICARD Software

Setting up and administering the system is made easy using the SOLICARD RiTA software, which can be used on any Microsoft Windows PC. With its simple menu structures, it is very user-friendly. Extensive listing and reporting functions are available, giving management full knowledge and control of the building security.

We offer the RiTA software in three versions, to suit different sizes of application: but upgrading from one to the next is simplicity itself.

- **RiTA 16-door**
A low-cost option for smaller systems.
- **RiTA Standard**
Offers full functionality on a single workstation.
- **RiTA Network**
Allows multiple workstations, with simultaneous control of different system elements by several different operators.



The functions of the RiTA system may be expanded further by installing a series of optional software modules:

Alarm Presentation Module

Allows SOLICARD 6000 to be linked to the building alarm system, providing full real-time monitoring and system control functions.

Status Table Module

Provides constant surveillance of selected doors within the system. Their current status is graphically depicted in a table.

Photo ID Module

Allows the design and creation of access cards which carry a photograph of the authorised user, for use as identification cards.

Photo Presentation Module

Automatically displays a photograph of the authorised card holder on a monitor screen when the card is used at a particular door, allowing security personnel to cross-check their identity.

Visitor Administration Module

Allows visitors to be registered and provided with visit or loan cards which give restricted and/or temporary access.

Zone Module

Allows a building to be divided into separate secure zones, with strict controls and monitoring of personnel passing from one zone to another. Includes anti-passback option and muster report.

Database Transfer Module

Allows user data to be imported and exported between the SOLICARD system and external databases, giving the facility to integrate with personnel, salary or similar administrative records.

Debit Module

Permits the access control cards to be used to pay for use of a facility, on a credit or debit basis. Full pricing functions and monitoring of purchases are available.

Distributed intelligence is the key to the SOLICARD system. Each control unit stores system data locally, ensuring that security is not compromised if communications with the central computer are lost.

Many control units can be linked together in a loop, each controlling a number of doors. The loop is then connected to the computer using a CL-20 signal transducer, which plugs into the RS-232 serial port of the PC.



6416 Control Unit

The most advanced control unit in the SOLICARD 6000 system, the 6416 operates 4 doors as standard, and may be expanded by fitting additional door cards to control a maximum of 16 doors. It stores up to 254 schedules and 65,000 cards locally, as well as an audit trail of the last 9,999 events. Connection to the door hardware is through a DAC, which simplifies installation and cabling.



6304 Control Unit

The 6304 can operate a maximum of 4 doors. It stores up to 45 schedules and 11,340 cards locally, as well as an audit trail of the last 1,000 events. Its functions may be expanded by the addition of specialist EPROMs.



6301 Control Unit

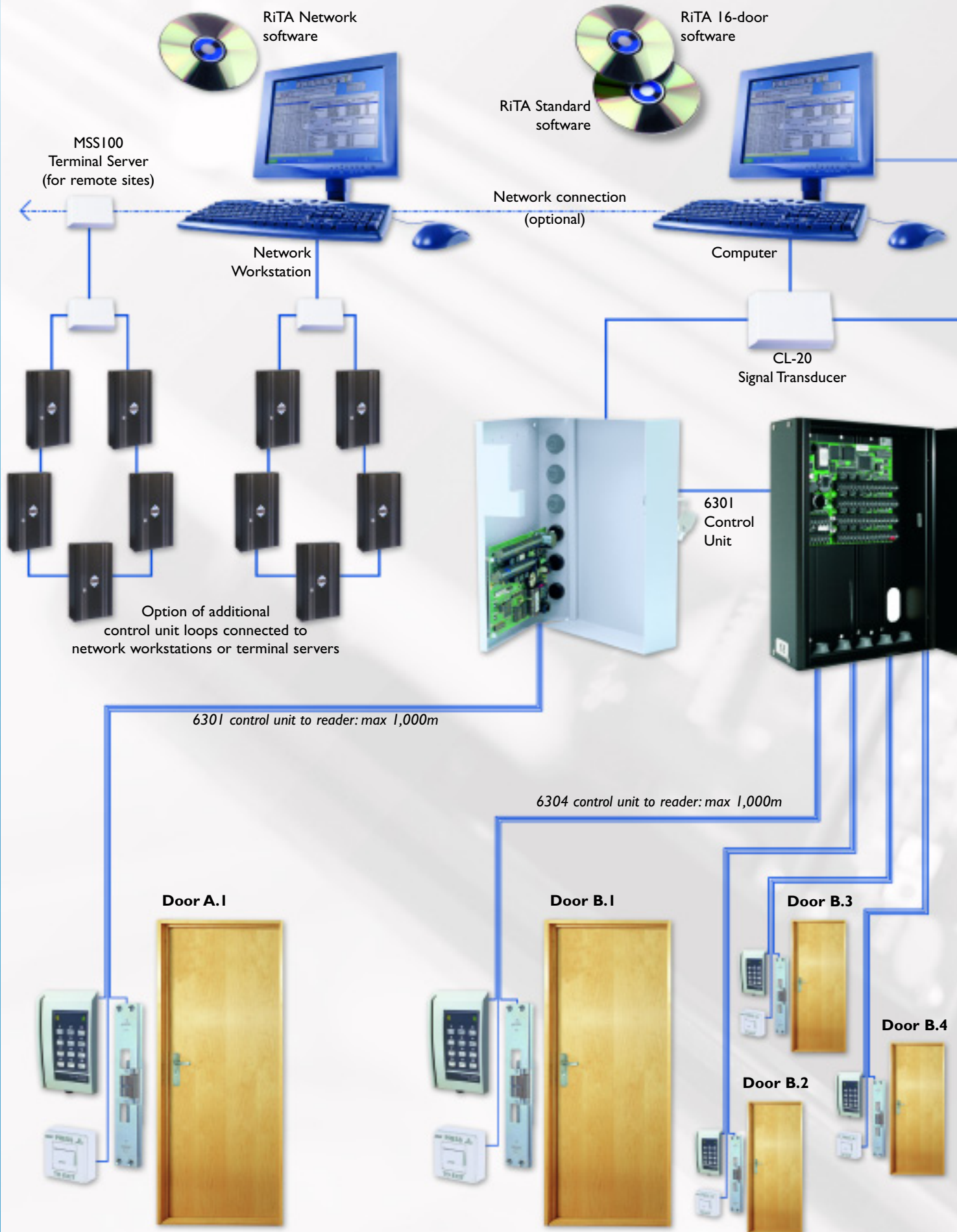
The 6301 can operate a single door. It stores up to 45 schedules and 16,000 cards locally, as well as an audit trail of the last 1,000 events. The 6301 incorporates a built-in CL-20. Its functions may be expanded by the addition of specialist EPROMs.



The 6416 is used in conjunction with DACs (Door Access Controllers). All the different hardware on each door is linked to the DAC: reader (or separate in and out readers), locking device and exit switch. A single cable then connects the DAC to the 6416, rather than having to connect each item individually. This greatly simplifies installation and maintenance of the system, thus reducing costs.

SOLICARD Hardware

SOLICARD 6000





System Schematic

SOLICARD Systems

Choosing the right reader technology for an access control system can make a tremendous difference to how simple it is to use and how readily it is accepted by personnel. This choice is made easy when you specify SOLICARD, because the system can be used with all industry-standard types of reader.

Full details of the readers available are covered in a separate brochure, allowing you to select the correct balance of security, convenience, and cost-effectiveness.



Magstripe

Using the familiar credit-card sized swipe or insert cards, magstripe is cost-effective and simple to set up. It is the most common reader technology currently in use.



Wiegand and Watermark

A development of the standard magstripe system, these cards are used in the same way but provide much higher security.



Smartcard

Cards with a computer chip embedded, providing very high security and also allowing integration with other systems such as cashless vending, pay-per-use facilities or storage of personal data.



HID iClass

The iClass system from HiD incorporates contactless smartcard technology, combining the benefits of smartcard and proximity readers.



Proximity

Proximity cards or tokens need only to be held close to the reader to activate it. This makes them very fast and easy to use, making this technology ideal for high-traffic areas.

HID

The HiD Proximity system offers easy to use and cost effective security, with a range of different cards and tokens available to suit individual user requirements.



Dallas

Dallas Touch Memory uses durable stainless steel tags clipped into a plastic key fob. The system is hard-wearing and low-maintenance, and ideal for harsh environments.



Indala

The Indala system uses FlexSecur technology, where cards are verified at the reader and all data stored on the cards is encrypted. This provides extremely high security.



Hands Free

Hands-free tokens work on the same principle as proximity, but at a longer range. The system is ideal for personnel or vehicle security and identification, asset surveillance and product tracking.



Biometrics

Scanning and recording a user's biometric data such as their eyes, fingerprints or palm prints produces an almost unique method of identification that cannot be stolen, lost or compromised.



While the heart of access control may be the electronic security system, this can only be as effective as the physical locking devices which provide the actual security at each door. ASSA manufactures a comprehensive range of locking systems, all designed to the same high standards of quality and performance.

Full details of these are available in a separate brochure.



Electric Strikes

Electric strikes work in conjunction with a mechanical lock to secure the door, and will release the lock bolt when the correct signal is received. ASSA electric strikes are heavy duty products, ideal for high traffic applications. They unlock very quickly once activated, and being independent of the lock allow for a key override, manual deadlocking or an escape function. We offer medium security and high security electric strikes in fail locked and fail unlocked/fail safe versions.



Solenoid Locks

Solenoid locks provide a single-unit solution to secure a door, and will unlock when the correct signal is received. As they appear identical to a mechanical lock once fitted, they match the appearance of other doors in a building, and may be used with the same type of door furniture. ASSA offers fail locked and fail unlocked solenoid locks, in sash lock and deadlock format and with a choice of backsets.



Magnets

Magnets offer a true fail-safe solution, allowing the door to open at a touch once the correct signal is received. With no mechanical moving parts, they are also highly resistant to wear. ASSA offers magnets for single and double doors, at three different levels of security.



Motor Locks

Motor locks provide the aesthetic benefits of solenoid locks, combined with an extremely high level of security. They are ideal for remote locking, perimeter security, and situations where the additional security of a hardened steel deadbolt is required during certain time periods. ASSA offers motor locks in three backsets, with deadlock, hookbolt and sash lock versions. Serial encrypted communication between the lock and control unit ensures security.



Door Hardware

In addition to our electric locks, ASSA also produces a complete package of mechanical security products and architectural door hardware. This range includes cylinders and keys, locks, escape products, door furniture, hinges and door closers. Because we manufacture all these items in-house, we can guarantee compatibility and ensure that every element of our system meets the same high standards.

Compatibility



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Trading solely as agent for ASSA ABLOY Ltd.

An ASSA ABLOY Group company

ASSA ABLOY

ASSA Ltd is the first choice for security solutions in government, commercial and institutional applications, achieved by providing a wide and flexible range of high quality, reliable products, supported by first-class customer service.

The ASSA ABLOY Group is the world's leading manufacturer and supplier of locking solutions, dedicated to satisfying end-user needs for security, safety and convenience.